
IEEE 802

Local and Metropolitan Area Network Standards Committee

Homepage at: <http://ieee802.org/>

Via the ECFS

09 May 2012

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Washington, D.C. 20554 USA

**Subject: IEEE 802 LAN/MAN STANDARDS COMMITTEE COMMENTS SUPPORTING
LICENSE-EXEMPT USAGE OF THE TELEVISION BAND WHITE SPACES**

1. IEEE 802¹ respectfully submits its comments supporting *license-exempt use of the Television Band White Spaces* (“TVWS”). This document represents the views of IEEE 802. It does not necessarily represent the views of the IEEE as a whole or the IEEE Standards Association as a whole.
2. IEEE 802, as a leading consensus-based standards body, produces interoperability standards for wired and wireless networking devices, including wireless local area networks (“WLANs”), wireless personal area networks (“WPANs”), wireless metropolitan area networks (“Wireless MANs”), and wireless regional area networks (“WRANs”). Included in our standards development activity is an emphasis on coexistence, which is the focus of our Wireless Coexistence Working Group.
3. Regulators in many national administrations have recognized the importance of the Television Band White Spaces (“TVWS”) spectrum. There is an on-going discussion about the most appropriate use of the TVWS and the benefits of licensed versus the license-exempt usage as part of a conversation about the future use of the television bands generally. Currently in the United States the TVWS frequency band is identified for unlicensed use and the associated technical rules dictate how the devices in that frequency band are required to operate. IEEE 802 has developed and continues to develop standards for a wide variety of applications including smart grid, regional and rural broadband access, local area networks and hotspots, healthcare and others within the regulatory framework established by the FCC including TVWS.
4. IEEE 802 supports the establishment of a regulatory framework permitting the use of *license-exempt* technology in the TVWS. We believe that opening up TVWS spectrum for license-exempt, in addition to licensed use, will spur unique innovations to address the meaningful communications needs of consumers, businesses and government agencies. Spectrum should not remain unused if

¹ The IEEE Local and Metropolitan Area Networks Standards Committee (“IEEE 802” or the “LMSC”), www.ieee802.org

there are radio technologies that can make use of the spectrum while preserving the established regulatory framework for the use of the TVWS frequency bands.

5. It is worth noting that significant innovations in our wireless communications standards such as IEEE 802.11 (Wi-Fi™), and IEEE 802.15.1 (Bluetooth™) were born in the spectrum bands with no exclusive license. It should be noted that wireless cellular service providers use other wireless networks such as Wi-Fi that operate in license-exempt spectrum. This reduces the congestion, provides network redundancy, and high data rates to ensure service quality in a cost-effective manner. IEEE 802 has contributed significantly to the use of unlicensed spectrum and will continue to do so. Provision of more license-exempt spectrum will allow further useful developments.
6. Across industries the use of the TVWS spectrum is vital, given its propagation characteristics, improved building penetration and enhanced regional and rural coverage.
7. In apportioning the frequency band between licensed and license-exempt uses it is important to make certain that a substantial amount of spectrum is kept available for license-exempt use.
8. License-exempt use of TVWS spectrum could support applications in healthcare, education, smart utility networks, disaster recovery, environment monitoring, critical infrastructure monitoring, border protection, homeland security, high speed internet, and other countless innovative areas
9. IEEE 802 has and continues to develop a number of standards and amendments to standards that provide wireless communications services in the TVWS.
10. IEEE 802 respectfully submits its position endorsing ***license-exempt use of the Television band White Spaces***. We believe that opening up TVWS spectrum to cognitive radio sharing technology can spur innovation to address meaningful communications needs of consumers, businesses and governments. IEEE 802 requests that in any on-going allocations proceedings substantial license-exempt devices spectrum is preserved across the full TVWS spectrum. IEEE 802 commends the FCC for maintaining a global leadership role in supporting unlicensed bands and enabling the evolution of such services as Wi-Fi, smart grid, RFID, WRAN and others. We hope the FCC will continue to play that leadership role supporting both new innovations and expansion of current services. IEEE802 looks forward to developing the required standards to support innovative communication services.

Respectfully submitted,

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